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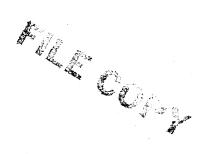








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Foreign Documents Branch C I A Periodical Abstracts

27 Jul 1948

SCIENTIFIC

Number 61

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Abstracted in this issue:

<u>Title</u>]	Issue	Date
Russian Periodicals			
"Byulleten' Moskovskogo Obshchestva Ispytateley Prirody, Novaya Seriya, Otdel Biologicheskiy" (Bulletin of the Moscow Society of Naturalists, New Series, Biological Section) Cards 1, 2, 52, 66-70	Vol LIII	No 1	Jan 1948
"Elektricheskiye Stantsii" (Electric Stations) Cards 11-21, 38, 39		No 2	Feb 1948
"Energeticheskiy Byulleten'" (Power Engineering Bulletin) Cards 22, 35, 36		No 3	Mar 1948
"Morskoy Flot" (Maritime Fleet) Cards 45-51		No 3	Mar 1948
"Neftyanoye Khozyaystvo" (Petroleum Economy) Cards 37, 53, 54, 87-91		No 2	Feb 1948
"Neftyanoye Khozyaystvo" (Petroleum Economy) Cards 92-101		No 3	Mar 1948
"Pochvovedeniye" (Soil Science) Cards 73, 103-106		No 3	Mar 1948
"Sovetskaya Agronomiya" (Soviet Agronomy) Cards 71, 72, 102		No l	Jan 1948
"Tekhnika Zheleznykh Dorog" (Railroad Engineering) Cards 23, 40-44, 74		No 2	Feb 1948
"Ugol:" (Coal) Cards 79-86		No 1 (262)	Jan 1948
"Ugol:" (Coal) Cards 55, 75-78		No 2 (263)	Feb 1948
"Veterinariya" (Veterinary Medicine) Cards 56-65		No 1	Jan 1948
"Zavodskaya Laboratoriya" (Factory Laboratory) Cards 3-10, 24-34	Vol XIV	No 1	Jan 1948



FDB Periodical Abstracts Scientific No 61



NOTE

In indexing these abstracts the following guides are used: MEDICINE - "Quarterly Cumulative Index Medicus," American Medicus, "American Medicus," American Chemical Association; CHEMISTRY - "Chemical Abstracts Subject Index," American Chemical Society; GENERAL - "Subject Headings for Technical Libraries," US Department of Commerce, Office of Technical Services.

Distribution

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FDB Periodical Abstracts Scientific No 61 USSR/Biology - Publications Jan 1948 Jan 1948 USSR/Biology - Publications "New Publications of the Moscow Society of Natural-"Books Available for Sale in the Stock of the Moscow ists" la pp Society of Naturalists" 1 p "Byullet Mosk Obshch Ispyt Pri, Otdel Biolo" "Byullet Mosk Obshch Ispyt Pri, Otdel Biolo" Vol LIII, No 1 Vol LIII, No l List of books published and in process of being pub-List of books on history, zoology, and botany in lished, dealing with history, zoology and anthropolstock and for sale at the society. ogy, botany, popular science series, and bibliographical handbook series. 61T2 FDB 61**T**1 FDB USSR/Chemistry - Metallurgy Jan 1948 USSR/Chemistry - Metallurgy Jan 1948 Engineering Chemistry - Metals, Ferrous - Determination Thermocouples "Use of the Type 'FOKO' Photocolorimeter and a Thermocouple Laboratory Galvanometer for Ferrous "A Method of Manufacturing Alundum Coverings for Thermocouples," S. N. Nikitin, Ye. G. Tabakova, Kuz-Metal Analysis," A. I. Masurova, Dnepropetrovsk nets Metallurgical Combine, 1 p Metallurgical Works imeni Petrovskiy, i p "Zavod Labor" Vol XIV, No 1 "Zavod Labor" Vol XIV, No 1 Describes use of alund (corundum) for measurements of Briefly describes operations of FOKO type photohigh temperatures of an active material such as metalcolorimeter for determination of phosphorous and lurgical slake. This material fulfills requirements silicon content in steel, widely used in laboratories of high degree of heat resistance and also chemical of Martin furnace plants. inertness. FDB 61T4 **61T**3 WITH USSR/Chemistry - Metallurgy Jan 1948 USSR/Chemistry - Gold - Detection Jan 1948 Chemistry - Filters Chemistry - Naphthylamine "A Multiple Action Sand Filter," A. G. Bogdanchenko, "Use of Alpha-Naphthylamine to Detect Gold," M. A. Chelyabinsk Metallurgical Works, 4 pp Popov, Cent Lab, Western Siberian Geol Adm, 2 p "Zavod Labor" Vol XIV, No 1 "Zavod Labor" Vol XIV, No 1 States that sand filters can be used instead of paper Brief description of subject method, used particufilters in experiments where filtration of a precipilarly for quantitative determination, based on an tate is necessary. Briefly describes use of a sand oxidizing-reducing process. filter for such operations. FDB **61T**5 FDB **61T**6 USSR/Chemistry - Hydrogen Sulfide Jan 1948 USSR/Chemistry - Nitrates - Detection Jan 1948 Chemistry - Air - Analysis Chemistry - Analyses - Methods "An Analysis of Vanadium Nitride," V. A. Epel'baum, "A Rapid Method for Determining Hydrogen Sulfide in Air," I. G. Vorokhobin, Ye. D. Filyanskaya, All-Union B. F. Ormont, Phys Chem Inst imeni L. Ya. Karpov, 12 pp Inst Preservation of Labor, 2 pp "Zavod Labor" Vol XIV, No l "Zavod Labor" Vol XIV, No 1

Brief description of Littl'fel'd's method, followed by author's method for exact determination of hydrogen sulfide whose content in air does not exceed 0.015 mg per liter of air. Describes construction of apparatus used in author's method of exact determination. Brief description of Dyum's, Kjeldahl's, and alkali method for determining amount of nitrogen in various compounds, particularly in nitrates.

FDB

FDB

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FDB Periodical Abstracts Scientific No 61

RESTRICTED

USSR/Chemistry - Sulfur Compounds Chemistry - Water Vapor

Jan 1948

USSR/Electricity Electrodes - Coatings Jan 1948

"Determination of the Organic Sulfur Compounds of Water Vapor, "Ye. A. Karzhavina, 4 pp

"Zavod Labor" Vol XIV, No 1

For determination of large quantities of sulfur compounds, titrated material was mixed with an alkali, whereupon SO was absorbed. For only traces of sulfur compounds, a nephelometric method using barium or lead sulfides was utilized.

Electrolysis

"Internal Electrolysis Using Protective Films," Yu. A. Chernikhov, G. A. Bol'shakova, State Inst Fine and Rare Metals, 9 pp

"Zavod Labor" Vol XIV, No l

Reports results of tests carried out by means of new method in which anode is directly covered by a colloidal film, thus greatly increasing range within which this apparatus can be utilized. It also increases amount of precipitate produced.

FDB

61T9 Feb 1948 FDB

61T10

USSR/Electricity

Transmission Lines, High Voltage Communications, Carrier Current

"Communications on the Electrical Transmission Lines of the USSR Power Systems," Ya. L. Bykhovskiy, Candidate Tech Sci, 4 pp

"Elek Stants" No 2

High frequency transmission on power lines was first started after World War I. Discusses technical fundamentals of high frequency channels on power lines, operational and economical indicators of high frequency communication along power lines, system used for such transmissions, and brief data concerning

FDB USSR/Electricity (Contd) **61T11**

Feb 1948

manufacture of necessary transmission apparatus at TsNIEL of Ministry of Power Stations.

Feb 1948

USSR/Electricity Machinery, Electric Dryers, Instrument

"Application of a New Method of Desiccation of Electric Machinery," B. P. Lebedev, Engr, 2 pp

"Elek Stants" No 2

Describes method for drying by means of a synchronous motor operating on principle of losses in metal of stator. Method can be used effectively for desiccation, using relatively little electric power; also permits easy and correct control of humidity of insulating windings.

FDB

61T12

USSR/Electricity

Power Plants - Bibliography

Feb 1948

"Books From the Press of the State Power Engineering Publishing House, Moscow" 1 p

"Elek Stants" No 2

List of books available for purchase by general public.

FDB

61T11 Feb 1948 FDB

61**T**13

USSR/Electricity

Power Plants - Specifications

"Power Engineering in the Struggle for Rapid Fulfillment of the Postwar Five-Year Plan" 1 p

"Elek Stants" No 2

Describes various measures which have been taken at the Moscow, Sverdlovsk, Donets power networks in order to assure fulfillment of norms established for period ending in 1950.

USSR/Electricity

Feb 1948

Power Plants - Construction Electrical Equipment - Installation

"Results of the All-Union Socialistic Competition in Enterprise and Construction, of the Ministry of Power Plants, for December 1947" 11 pp

"Elek Stants" No 2

Reports results of competition held among workers of the power systems, thermal electrostations, hydrostations, electric networks, construction of power stations and networks, and various factories producing electrical equipment.

FDB

61T14

FDB

FDB Periodical Abstracts Scientific No 61

RESTRICTED

USSR/Electricity

Turbogenerators

Feb 1948

Conduits, Electric Hydroelectric Plants - Maintenance and Repairs

hydroelectric power station.

duit, S. N. Aleksandrov, Engr, # p

Electric Systems - Protection

"A Case of Damage to a 154-kv Oil-Impregnated Con-

Describes case of an oil-impregnated conduit, damaged during repairs which were being made on a type MKP-

180 D oil cutout switch which had a defective porce-

tight control over power. Cutout switch installed at

"The Struggle Against Icing in Cooling Towers," V. I.

Presents methods to control freezing of cooling

towers in connection with drive to conserve fuel.

Freezing of cooling towers must be prevented for

Electrical Equipment - Installation

"Liquidation of Lagging Electric Power Plant Con-

Plans for 1946 and 1947, first two years of postwar Five-Year Plan, have been fulfilled 100%; however,

certain fields under this overall 100% are behind.

skiy, Sumgaitskiy, Bryansk, Belcrusskiy, and other

by lack of proper operational organization.

Particularly lagging is construction work at Igumnov-

them to operate at maximum efficiency, even during

lain cover. During tests it is necessary to keep

USSR/Electricity

"Elek Stants" No 2

USSR/Electricity

Freezing

Obbarius, Engr, 1 p

"Elek Stants" No 2

winter months.

USSR/Electricity

struction" 2g pp

"Elek Stants" No 2

Power Plants - Electric

Feb 1948

"Reports" 2 pp

"Elek Stants" No 2

Technical Council, Ministry of Power, published a report on the asynchronous regime of turbogenerators after loss of starting impulse. Technical section of Ministry published articles on methods for preventing damage to tube lead in conduits, methods for putting out fires in generators, and a brief notice regarding the change over to new system (MKSEW) of electrical units and measurements.

Generators - Maintenance and Repairs

FDB

USSR/Electricity

61T16

Feb 1948

Generators, Turbo

Turbogenerators - Maintenance and Repairs

"Damage to the Rotor Winding of a 50 Thousand kw Turbogenerator, " L. A. Mirenburg, Engr, 1 p

"Elek Stants" No 2

Describes repairs made on subject rotor installed in plant of "ElektroSil" combine. Urges that in all stations equipped with turbogenerators, a complete check of coils between rotor drum and cap be made when overhauling equipment.

FDB

61T18

Feb 1948

FDB

FDB

61T19 Feb 1948

61**T**17

Feb 1948

USSR/Electricity

Power Plants - Electric

Electrical Equipment - Installation

"In the Collegium of the Ministry of Electric Power Plants, Approval of the Types of Machinery, Devices and Apparatus Produced by Factories of the Ministry of Power Stations" 2 p

"Elek Stants" No 2

Session of Ministry, with Minister D. G. Zhimerin presiding as chairman, approved products and operation of factories under jurisdiction of Ministry of Power Stations. Also approved series of new techniques to be used in 1948 production to fill demands caused by new power stations. FDB

USSR/Electricity

61T20Mar 1948

Currents, Electric - Leakage

Transmission Lines

"Cases of Ignition of Wooden Posts From Leakage Currents on 35 and 2 Kilowatt Electric Transmission Lines," I. L. Shirokov, KazEnergoNeft', 32 pp

"Energeticheskiy Byulleten'" No 3

In 1945 there were 14 cases of ignition of transmission line poles recorded in KazEnergoNeft' trust. Meteorological conditions, mechanical conditions and all other aspects of this problem are discussed.

FDB

61T22

FDB

large capacity power stations. Schedule lag caused 61721

FDB USSR/Electricity

Feb 1948

Transmission Lines - Maintenance and Repair Bibliography

"A Review of 'Handbook for Electrical Mechanics and Repairmen of Regional Communications Lines, by A. A. Sparskiy, G. K. Kezhukhov, and L. F. Pustovoytov," G. K. Tarasov, Engr, 1 p

"Tekh Zhelez Dorog" No 2

Second printing, 1947, 466 pages. Material covered in book is valuable for communications field, however, many errors in formulas make some parts of book unreliable.

61**T**23

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FDB Periodical Abstracts Scientific No 61

RESTRICTED

USSR/Electronics

Detection, X-Ray Crystals - Liquefaction Jan 1948

USSR/Electronics Electrometers Acidity

USSR/Electronics

ture and operate.

USSR/Electronics

Acad Sci USSR, 4 pp

"Zavod Labor" Vol XIV. No 1

Vacuum Tube Testing

"Zavod Labor" Vol XIV, No 1

Vacuum Apparatus

"Electromagnetic Determination of Acidity in Mineral

Acidity of heavy metal salts can be determined by

titration with aid of a galvanometer as indicator.

Nature of salt at times causes margin of error in

fides, but slightly greater for nitrates. Deter-

mination of equivalent point must be conducted on solutions obtained from same salt whose acidity is being tested. FDB

"A Tesla Arrangement for Testing Vacuum Systems,"

Describes a Tesla arrangement based on data submitted

by Engineer B. N. Dyn'kov. This apparatus could fill

"A Series Electronic Amplifier for Photometric Cells," S. M. Faynshteyn, Inst Automatics and Telemechanics,

Describes new photoelectronic amplifier with small

current sensitive to visible portion of light spec-

trum. This photoelectronic amplifier will find its

greatest use in spectrum-chemical analyses, and will

a deficiency in technology, being simple to manufac-

V. T. Slavyanskiy, State Optical Inst, 2 pp

electrometric method of determining acidity. This

error averages less than 0.5% for chlorides and sul-

Salt Solutions," A. B. Dranovskiy, 3 pp

Jan 1948

61T25

Jan 1948

"An X-Ray Method of Determining Intercrystalline Liquefaction," Ts. L. Mints, 4 pp

"Zavod Labor" Vol XIV, No 1

Shows that intercrystalline liquefaction could be determined by X-ray structural methods. Develops methods for obtaining close interference lines which can be used in microphotometry. Results of microphotometry permit determination of quantitative distribution of concentrate in crystals, also determination of progress of diffusion in crystals.

FDB

61T24

USSR/Electronics

Jan 1948

Electromagnets Magnetic Measurements

"A Compact Electromagnet," S. K. Sidorov, Inst Phys of Metals, Ural Br, Acad Sci USSR, 12 pp

"Zavod Labor" Vol XIV, No 1

Describes an easily and economically produced compact electromagnet, which permits measurement of magnetic and galvanomagnetic properties at room temperature as well as at temperatures at which nitrogen boils.

FDB

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FDB

61T27 Jan 1948

USSR/Electronics Batteries

Jan 1948

Chemistry - Hydrogen - Ion Concentration

"A Graphic Method of Rapid pH Computation of a Solution in a Battery of Any Voltage," N. D. Biryukov, Sci Res Inst, Commercial Air Fleet, 22 pp

"Zavod Labor" Vol XIV, No 1

Describes method for rapid computation of pH of battery solution based on a simple instrument, which records by means of a needle or else registers automatically and graphically. Barring any type of inertia in instrument, pH values are registered with a margin of error of ± 0.04 .

FDB

61T28

USSR/Electronics

Jan 1948

Spectrographs - Manufacture X-Ray Analysis

"A Simple Model of an X-Ray Spectrograph With a Curved Crystal, and Its Manufacture, "G. F. Komovskiy, State Inst Fine and Rare Metals, 5 pp

"Zavod Labor" Vol XIV, No 1

Describes an X-ray spectroscope, with a curved crystal, which can be utilized for analyses. Method for preparation of this crystal first suggested by Koshu. Its manufacture is simple, requiring very little lather processing.

FDB

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FDB

FDB

USSR/Electronics

replace photographic as well as visual methods.

X-Ray Spectra - Determination X-Rays - Intensity

Amplifiers, Photoelectronic

Spectrochemical Analysis

"Zavod Labor" Vol XIV, No 1

"An Approximation Method for Determining the Relations of the Intensity of X-Ray Spectral Lines," V. N. Protopopov, All-Union Sci Res Geol Inst, 7 pp

"Zavod Labor" Vol XIV, No 1

New method to determine intensity of lines by comparison. Permits determination of a graphic method and use of these graphs for making corrections in interpolation as well as extrapolation in determined intensity of compared lines.

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Jan 1948

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FDB Periodical Abstracts Scientific No 61

RESTRICTED Jan 1948

USSR/Engineering

Jan 1948

Acetylene - Detection

Gas Analysis

"New Methods for the Determination of Acetylene in Gaseous Mixtures and in Air," I. I. Strizhevskiy, Inst Autogenous Processing of Metals, 8 pp

"Zavod Labor" Vol XIV, No 1

Presents important contributions of Soviet scientists with respect to manufacture and determination of acetylene in gaseous mixtures and air. Increase in use of acetylene, by various branches of mechanics, demands greater production and makes new requirements for methods of determination of this gas. Soviet scientists have done much to supply various deficien-FDB 61**T**32 cies.

USSR/Engineering

Jan 1948

Salinometers Hydraulic Machinery

"Automatic Determination of High Saline Content by a Standard Salinometer With Small Measuring Capacity, A. F. Vinogradov, V. A. Kazakov, All-Union Sci Res Inst for Water Supply, Sewage, Hydrotech Construction and Engr Hydrology, 3 pp

"Zavod Labor" Vol XIV, No 1

Explains construction of a hydraulic apparatus for rapid determination of salt content of concentrated solutions. Apparatus needs further improvement before it is put to industrial use.

FDB

61T34

USSR/Engineering Turbines, Gas Mar 1948

"Antipampazh /sic/ Construction of Gas Turbine Installations and Its Regulation, " M. V. Gladnov, Org-EnergoNeft', 4 pp

"Energeticheskiy Byulleten'" No 3

Phenomenon which takes place in gas turbines, cutting off the supply of air to the gas turbine compressor with a complete loss of its manometric pressure and accompanied by strong air pulsations inside the compressor is called pampazh [sic7. Gives diagrams and description of a device designed to eliminate this phenomenon.

FDB

61**T**36

USSR/Engineering

Feb 1948

Cargo Handling Freezing

"Facilitating the Unloading of Cargo Which Has Frozen Together, "G. P. Yankovich, Engr, 2 pp

"Elek Stants" No 2

Coal, under transportation for long periods of time at low temperatures, freezes together and makes unloading difficult. Problem can be overcome by running rail cars into a heating shed before sending them to unloc loading platform. Gives data for building sheds. that will handle up to 200 cars per 24-hour period.

FDB

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USSR/Engineering

Machinery - Construction

Gas Analyzers

"A Catalytic Gas Analyzer for Ammonium-Air Mixtures," L. G. Urusovskaya, D. A. Frank-Kamenetskiy, Chernorechensk Chem Works imeni M. I. Kalinin, 4 pp

"Zaved Labor" Vol XIV, No 1

Describes tests conducted to determine data necessary for construction of an apparatus permitting uninterrupted control of ammonium-air mixture in process of oxidizing ammonia. Catalytic gas-analyzer used as basis of apparatus.

FDB

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USSR/Engineering Combustion

Fuels, Liquid

"Combustion of Gaseous and Liquid Fuel by the Flameless Surface Combustion Method," I. A. Sandomirskiy, GlavVostokEnergoNeft', 4 pp

"Energeticheskiy Byulleten'" No 3

Discusses method of flameless combustion, showing several cross section diagrams of installations used. In future, natural gas will play a more important role as a fuel for enterprises, necessitating inauguration of a new technique of combustion in industries concerned.

FDB

61**T**35 Feb 1948

USSR/Engineering

Sulfur Compounds - Production

"The Production of Sulfofrezol With the Use of Lump Sulfur," N. V. Golovanov, 3 pp

"Neftyanoye Khozyaystvo" No 2

In 1942 sulfofrezol plants faced dilemma of either organizing operations to pulverize sulfur on a large scale, or creating a technological process which would use lump sulfur. Describes briefly method devised.

FDB

61**T**37 Feb 1948

USSR/Engineering

Clays

Oil Reclamation

"Use of Khar'kov 'Zelenka' Clay for the Reclaiming Industrial Oils," Ts. O. Gekhtman, Engr; Docent S. N. Kuz'menko, ½ p

"Elek Stants" No 2

Describes tests conducted at Khar'kov city power station on subject clay. Compares results obtained from use of 'Zelenka' and those obtained from use of 'Gumbril,' which is usually used as reclaiming material.

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USSR/Engineering Railroads Bibliography Feb 1948

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Feb 1948

"Works of the All-Union Scientific Research Institute of Rail Transportation" 1 p

"Tekh Zhelez Dorog" No 2

List of books published or about to be published by Institute. Inquiries are to be addressed to Moscow, Bol'shaya Pereyaslavskaya, 46, Knigosbyt TransZhelDorIzdat.

FDB

USSR/Engineering Tracks, Railroad Tracking - Design

"The Preeminence of Soviet Science in the Field of Rails," Prof P. G. Koziychuk, Dr Tech Sci; I. A. Ivanov, Candidate Tech Sci, 12 pp

"Tekh Zhelez Dorog" No 2

Briefly compares rail relief of various countries, particularly with the USA, showing how the USSR has surpassed everybody in this field. States that Soviet achievements in field of rail design should be made known to all young technicians concerned with maintenance of USSR's predominance in this field.

FDB 61T42

USSR/Engineering

Feb 1948

Bridges, Trestle Bridges, Railway - Construction

"Welded Bridges for Railroads," Docent B. N. Duchinskiy, Candidate Tech Sci, 3 pp

"Tekh Zhelez Dorog" No 2

Welding, a creation of Soviet inventive genius, has put Soviet Union in fore in field of welded bridge construction, particularly with respect to railroad bridges. In 1947, 60% of bridges (10,000 tons) /sic7 in use were of welded construction. Describes various aspects of welded construction, including types of metal, and performance of bridges.

FDB 61T44 USSR/Engineering

Ships, Merchant

Mar 1948

Ships - Technical Operation

"All-Union Conference for Technical Exploitation of the Fleet" 2 pp

"Morsk Flot" No 3

Workers of Maritime Fleet met in Leningrad in Feb to discuss questions regarding technical operation of ships. Meeting was presided over by L. Yu. Belakhov, Minister of Maritime Fleet. Following issues of "Morskoy Flot" will carry short versions of articles and papers read at this session.

USSR/Engineering Lighting, Fluorescent Cars, Railroad

"Fluorescent Lighting in Railroad Transportation," K. P. Belov, Candidate Tech Sci; L. T. Oleynikova, Sci Colleague, 2 pp

"Tekh Zhelez Dorog" No 2

Discusses installation of fluorescent lighting in railroad cars as one method of economizing on electric power. Brief description of operation of gas tubes.

FDB

61T41 Feb 1948

USSR/Engineering Tracks, Railroad Tracking - Construction

"Partial Installation of Double Tracking," A. D. Karetnikov, Candidate Tech Sci, 3 pp

"Tekh Zhelez Dorog" No 2

Postwar plans call for large scale laying of double tracks, requiring great expenditure of metal, lumber, concrete, and materials vital to national economy. Surveys must be conducted with objective of determining locations where double tracks would serve best. Partial laying of double trackage would speed up transportation and not cause too great a drain of vital materials.

FDB

61T43 Mar 1948

USSR/Engineering Ships, Merchant Bibliography

"The Book Shelf" l p

"Morsk Flot" No 3

List of books available for purchase, including: G. A. Dubrova, "Methods of Determining the Brace Stress of the Ground During Hydrotechnical Constructions"; I. I. Kazanskiy, "The Effects of Load Variations on the Initial Setting and Settling of a Ship"; L. S. Turetskiy and G. I. Balandin, "Planning Work for Fleet and Ports"; P. D. Samolovich, "Cost Accounting Interrelationships Between Organizations

FDB USSR/Engineering (Contd)

61145 Mar 1948

of the Maritime Fleet"; and M. K. Petrov, "Loading and Unloading Equipment."

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USSR/Engineering Welding, Seam Metals, Babbit

Mar 1948

USSR/Engineering Turbogenerators. Marine Steam Engineering

Semeka, Candidate Tech Sci, 11 pp

Mar 1948

"Casting of Bearings and Making of Sabbit Weld Seams With the Aid of an Autogenous Welding Torch," N. Yakovlev, Chief Engr, AShGES, 2 p

"Morsk Flot" No 3

Brief data on use of seam welding to cover bearings with babbit. Author reports that this method gives good results.

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61T48

USSR/Engineering Ships, Passenger

Mar 1948

Shipping - Industry Machines, Hoisting

Mar 1948

Ships - Specifications

"Requirements for Passenger Vessels on the Crimea-Caucasus Line, "S. Layner, Candidate Tech Sci, 4 pp

"Morsk Flot" No 3

New vessels are based on design of vessels now plying subject route, including "Krym," "Gruziya," "Adzharis-tan," "Abkhaziya," etc. Vessels now in design stage will be 1,100 meters along water line, beam about 18 meters, 6 meters draught when empty; speed 11-12 knots, with a capacity for 1,000 tons of cargo; capable of carrying about 900 passengers comfortably. These boats will be known as "Krymchak" type.

USSR/Engineering

Mar 1948

Ships - Loading Shipping - Industry

"Rapid Handling of Ships in the Port of Klayped," N. Sterkin, 6½ pp

"Morsk Flot" No 3

Brief description of degree of mechanization, and measures for efficiency adopted at port of Klayped with respect to easy and rapid loading and unloading of ships. This accomplished by installation of sufficient cranes, and training dockhands to accept certain labor and time-saving devices and operations. Cites examples of this efficiency, for one 716-ton cargo (mixed) there was a time saving of 31 hours. FDB <u>61T51</u>

USSR/Geology

Feb 1948

Stratification Petroleum

"The Continental Stratum of Gorznensk Oblast -- A New Object for Prospect Drilling," A. I. Tsaturov, 3 pp

"Neftyanoye Khozyaystvo" No 2

Geological characteristics of deposits discovered in 1935 along Adu-Yurt River indicate a large continental stratum and prospects of oil capacity in northeastern part of Groznensk Oblast in the northern part of Dagestan ASSR. Summarizes reports of studies of this deposit.

FDB

61T53

FDB USSR/Engineering

launched in 1944.

"Morsk Flot" No 3

"Calculations for Hoisting Devices Which Hold Loads by Means of Friction," V. Sirotskiy, TsNIIMF, 52 pp

"Present-Day Auxiliary Marine Turbogenerators." V.

Brief description of contemporary marine turbogener-

ators with the primary objective of greater economy

ducted on two turbogenerators, similar to those installed in the turboelectric ship the "V. Molotov" (1939), and also on several turboelectric tankers

in use of steam. Discusses results of tests con-

"Morsk Flot" No 3

Presents various formulas to calculate permissible loads for several types of grapplers (grappling hooks for lifting loads).

FDB

61750

USSR/Geography - Hydrography Soil Science

Jan 1948

"On the Biological Complexity of the Soil-Vegetation Cover in the Arid Zone, "Ye. P. Korovin, S. A. Shuvalov, 16 pp

"Byullet Mosk Obshch Ispyt Pri, Otdel Biolo" Vol LIII, No 1

Experiments and studies conducted in water shed district located 44-20 to 45-20 latitudes, east of Churuk meteorological station. Presents data on fundamental physical geographical processes of Ust'-Urt plateau, relationship of association inside of complex, salt state of plant complex in connection with soil, and complexity of cyclic changes. FDB

USSR/Geology Tectonics Feb 1948

"Normal Cross Sections of the Devonian Deposits of the Syzran Region, " V. A. Dolitskiy, A. A. Safontsev, G. G. Tsyplenkov, 9 pp

"Neftyanoye Khozyaystvo" No 2

Normal crosscuts of Devonian deposits are made from three structures: Zaborovskoy, Syzranskoy and Gubinskoy. All three structures are connected with undulations of the axis of a single tectonic upheaval, northern wing of which is the Zhigulevskaya fold.

FDR

FDB Periodical Abstracts Scientific No 61

RESTRICTED

USSR/Geology Geological Prospecting Coal

Feb 1948

Medicine - Veterinary Medicine

Jan 1948

"The Basic Directions of Geological Prospecting for Coal in Sverdlovsk Oblast, "Ya. M. Chernousov, Candidate Geol-Mineralo Sci, Sverdlovsk, 2 pp

"Ugol" No 2 (263)

Four main tasks set before geological survey personnel: 1) location of anthracite scal beds; 2) location of chunk coal deposits; 3) location of rock coal deposits; and 4) location of lignite coal beds, similar to those in Bogoslovskiy, Veselov, and Volchansk. It is noted that search for anthracite will be at depths of 750 meters in Egorshinskiy coal beds.

61T55

USSR/Medicine - Animals - Diseases Medicine - Veterinary Medicine Jan 1948

"Application of Sulfantrol (C-55) in Paratyphoid Articular Fracture in Stallions," A. V. Deryabina, Vet; G. T. Shabrov, Vet, Chair of Epizootology, Chkalov Agr Inst imeni A. A. Andreyev, 1 p

"Veter" No 1

Experiments show that sulfantrol is five times more effective than other types of chemical preparations. However, it is effective only if administered per os. Intravenous injection of a 4% solution did not show results.

USSR/Medicine - Animals - Diseases Medicine - Veterinary Medicine

61157 Jan 1948

"Results of Tests With Brucello-Hydrolisate Used as an Allergic Reagent for Brucellosis Diagnosis, " V. M. Krasnov, Candidate Biol Sci, All-Union Inst Experimental Vet, 4 pp

"Veter" No 1

FDB

Describes results of tests conducted with two brucellosis allergic reagents: 1) abortin, and 2) brucellisate. Former is more effective on cattle, but brucellohydrolisate is most active, specific, and most modern allergic reagent for brucellosis diagnosis. This reagent does not bring about any harmful aftereffects in animals. FDB

USSR/Medicine - Sheep

Medicine - Vitamin A

61**T**58 Jan 1948

"The Significance of Vitamin A and Vitamin Therapy in Sheep Breeding," Prof T. V. Gorb, Dr of Agr Sci; Z. P. Semenchenko, Aspirant, All-Union Inst Animal Husbandry, 5 pp

"Veter" No 1

Tests to establish effect of vitamins on sheep obtained following results: lack of vitamin A in feed will lower productivity of sheep; lack of this vitamin has adverse effects on organic function of sheep; lambs, observed to have become sick as a result of eating feed off ground, were cured by addition of vitamin A to this feed. 61160

USSR/Medicine - Animals - Diseases

"Early Therapy for Skin and Cestrual Diseases in Cattle, " A. M. Priselkov, M. G. Khatin, M. Z. Ganelina-Lur'ye, 32 pp

"Veter" No 1

Larvae causing skin and cestrual diseases in cattle have two life-cycles: 1) during which microbe lives outside an animal; and 2) during which it inhabits internal organs of an animal. Most effective method of controlling disease is by killing larvae before they enter the animal. Presents various methods among which DDT figures prominently. Methods for

61T56

USSR/Medicine - Animals - Diseases (Contd) Jan 1948

preventing discase after larvae have entered organs of the animal are also presented.

FDB

6**1T**56

USSR/Medicine - Animals - Diseases Medicine - Veterinary Medicine

Jan 1948

"Diseases of Young Animals," edited by M. G. Lagereva, 4 pp

"Veter" No l

Presents a list of articles, and summaries, dealing with various diseases in young animals. Among those mentioned are: V. P. Loginov, "Some Features of Paratyphoid in Calves of the Altay Kray"; A. S. Solun, "Basic Tasks of Preventive Medicine in Mass Diseases of Young Animals in the Eastern Regions of the USSR"; and P. A. Bogdanov, "Prophylaxis of Infectious Diseases in Calves."

FDB

61759

USSR/Medicine - Animals - Diseases Medicine - Beets

Jan 1948

"The Garden Beet as a Cause of Mass Poisoning of Swine, the Etiology of the Poisoning, and a Method of Treatment," Prof A. Ya. Lukin, 3 pp

"Veter" No 1

Use of methylene blue is recommended as radical means of treating methemoglobin resulting from nitrate poisoning. Doses for swine were 0.01-0.02 grams of methylene blue for each kilogram of weight of swine. Doses were administered in solution.

FDB

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USSR/Medicine - Animals - Diseases Medicine - Bibliography

Jan 1948

Jan 1948

"Material Submitted for Publishing" 4 pp

"Veter" No l

Summaries of various books and articles submitted for publication, including: T. V. Pashov, "Sulfantrol in Bovine Variola"; I. M. Saraykin, "Cases of Mass Intoxication of Cattle"; K. L. Leont'yev, "Treatment of Tympanites in Large Cattle With Milk"; P. I. Bozhevol'nov, "Freezing of a Cow's Teats"; and V. F. Bervi, "A Device for Intravenous Infusion."

USSR/Medicine - Animals - Diseases Medicine - Veterinary Medicine

"Infectious Diseases in the Young of Farm Animals," Prof R. A. Tsion, Dr Vet Sci, 3 pp

"Veter" No 1

Short summary of work done for last 30 years. Deals in particular with advances made concerning various typhus diseases of the young.

FDB

61162

USSR/Medicine - Animals - Diseases Medicine - Veterinary Medicine

Sr Vet, Primorskiy Adm Dal'stroi, 1 p

Jan 1948

FDB

USSR/Medicine - Animals - Diseases Medicine - Veterinary Medicine

61163 Jan 1948

"Treatment or Diplostreptococcus Infection in Calves With Disulfane, " V. V. Zhuravlev, Chief Vet Voronezh Animal Breeding Trust, 1 p

"Veter" No 1

Describes experiments on 23 calves of which 17 were cured. Gives doses administered and effects obtained.

"Veter" No 1

Enteritis usually has 50-60% mortality rate among calves. Dysentery in calves can be caused by anaerobion B. perfringens. Epidemic can best be checked by thorough assanation of grazing and living areas. Formalin vaccines and antitoxins have proved effective in reducing mortality rate.

"Enteritis of Calves Caused by Anaerobia," Razmazin,

FDB

61T64

USSR/Medicine - Biology

Jan 1948

USSR/Medicine - Sheep

61165 Jan 1948

"The Wild Ram in Turkmen," V. I. Tsalkin, 18 pp

"Byullet Mosk Obshch Ispyt Pri, Otdel Biolo" Vol LIII, No 1

From end of 1941 to fall of 1942 author studied the wild ram in Turkmen. Lists habits of Turkmen ram, its habitat, breeding, and various characteristics which provide better understanding of the wild ram.

"Elements of the General Theory of Vector-Brownian Processes, and the Laws of Biological Kinematics," N. I. Kobozev, 30 pp

"Byullet Mosk Obshch Ispyt Pri, Otdel Biolo" Vol LIII. No 1

Describes experiments conducted to solve two problems: 1) relationship between vector and Brownian components in trajectories; and 2) make trajectories "Brownian" by taking vector potential inherent in organisms, in this case insects. Editors note that this work, in parts, closely follows material published by E. Shredinger in his book "Life From the Standpoint of Physics.

USSR/Medicine - Shellfish

Jan 1948

"New Forms and Occurrences of Donacii (Coleoptera, Chryzom elidae Subfam. Donaciinae) in the Fauna of the USSR," V. B. Shavrov, 4 pp

"Byullet Mosk Obshch Ispyt Pri, Otdel Biolo" Vol LIII No 1

Continuation of a previous article which appears to be taken from a German publication: Coleoptera. Zentralblatt 1930, Vol S, No 1, page 29. This part discusses briefly the Plateumaris consimilis orientalis subsp. n.; Donacia impressa Rauk. ab. (morpha?) armillata nova; Donacia appendiculata Abrens ab. coeruleans nova (ab. coeruleans Reitt. i.l.), and several others. Brief passage on new localities where Donacii have been found FDB 61T68

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61**T**67

USSR/Chemistry - Air - Organic Substances Jan 1948 Medicine - Bacteriology

"The Biological Significance of Phytogenic Organic" Substances of the Atmosphere," N. G. Kholodnyy, 20 pp

"Byullet Mosk Obshch Ispyt Pri, Otdel Biolo" Vol LIII, No l

Organic materials flying around in the air are of great importance to the composition of the atmosphere. Experiments conducted to determine exact role of such organic substances in natural economy, and to determine effect of these organic substances on life of living organisms on earth's surface. Gives detailed descriptions of 12 experiments.

FDB

FDB Periodical Abstracts Scientific No 61

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USSR/Medicine - Heredity in Plants Medicine - Heredity Mechanism

Jan 1948

"A Study of Mutation Variability in Connection With the Problems of the Evolution of Plants," I. N. Sveshnikova, 8 pp

"Byullet Mosk Obshch Ispyt Pri, Otdel Biolo" Vol LIII, No 1

Describes experiments conducted to obtain maximum oscillation of an organism, and greatest possible fluctuation or variation amplitude in phenomenon of mutation. Presents work, being conducted by the author, to study evolution of nucleus in plants, with objective of obtaining trisomas in Vicia sativa, for localization of genes in determined chromosomes.

USSR/Medicine - Beetles

Jan 1948

Medicine - Insecticides

"The Pea Weevil and Measures for Combatting It," B. G. Shurovenkov, 3 pp

"Sovetskaya Agronomiya" No 1

Gives procedure for controlling spread of pea weevils in areas of USSR which grow large crops of peas. Treats problems: 1) eliminating weevils from places where peas are stored, either for shipment or for use as seeds; 2) eliminating weevils from fields where peas are grown; 3) isolation of fields not yet infested; and 4) quarantine measures.

FDB

61172

USSR/Meteorology Indicators, Wind Winds - Direction

Feb 1948

"Storm Wind Roses," Ye. V. Boldakov, Candidate Tech Sci, ½ p

"Tekh Zhelez Dorog" No 2

Discusses fundamentals for the construction of wind roses.

FDB

61174

USSR/Mines and Mining Mining Methods

Feb 1948

"On the 'Cupping' of Thick Slanting Beds of the Chelyabinsk Basin," Prof D. N. Ogloblin, Dr Tech Sci, 2 p

"Ugol'" No 2 (263)

This article is connected with an article by Engineer I. N. Polzikov "Working Slanting Beds of the Chelyabinsk Basin to Their Full Capacity" published in "Ugol'" No 9 (1947). Advocates abandonment of cupping or boss method of mining since it is wasteful.

USSR/Medicine - Insecticides Medicine - Sodium Nitrite

Jan 1948

"Use of Sodium Nitrite as an Insecticide," I. K. Tsitovich, 3 pp

"Sovetskaya Agronomiya" No 1

Spraying with 5% solution of sodium nitrite at rate of 500 cu cm cm 1 sq m is new method of employing liquid disinfectant for granaries infested by certain insects. Fumigation of empty granaries with nitrogen peroxide effectively kills certain types of insects, using 200 grams of sodium nitrite per cubic meter of the building and 600 cu m diluted (1:5) industrial sulfuric acid.

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61771

USSR/Medicine - Grain Medicine - Moisture Mar 1948

"Organization of Continuous Research on the Movement of Moisture, Principally in the Soil Zone of Its General Rotation," G. N. Vysotskiy, 4 pp

"Pochvovedeniye" No 3

Article found in archives of Institute of Grain Economy of Southeast USSR. Since questions which treated in article are of great current interest; it has been reproduced with slight condensation. Vysotskiy gives plan for organization of research on circulation of moisture.

FDB

61**T**73 Feb 1948

USSR/Mines and Mining Mining Methods - Coal Bibliography

"Some Remarks on Textbooks for Engineering Minimums," G--ov, Engr, $2\frac{1}{4}$ pp

"Ugol:" No 2 (263)

Completion of Five-Year Plan in four years calls for an all-out effort to establish means for efficient operations. This is particularly important in the coal mining field since it is the one part of national sconomy that has not yet benefited from modern improvements. Briefly discusses methods which would increase Soviet coal production.

FDB

61175

USSR/Mines and Mining (Contd)

Feb 1948

Particularly stresses shortcomings of present-day textbooks on mining techniques.

FDB

61176

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FDB Periodical Abstracts Scientific No 61

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USSR/Mines and Mining Mining Equipment

Feb 1948

"Primary Results of the Application of Type SGK Metal Pillars in the Don Basin," M. N. Geleskul, V. T. Davidyan, Engineers, 32 pp

"Ugol'" No 2 (263)

Describes parts of subject pillar, and gives brief account of each part. They are stronger than wooden pillars. Mentions fact that miners will be charged for using too many of these pillars, above and beyond planned number.

FDB

6**1T**77

USSR/Mines and Mining Mining Machinery Mining Methods Jan 1948

"Mechanization of Mining in the Soviet Union and in Capitalistic Countries," Docent N. P. Lakoza, Leningrad Mining Inst, 32 pp

"Ugol" No 1 (262)

In graphic form presents increase of mechanization of mining in capitalistic countries, then shows similar graph for mechanization in Soviet Russia. Capitalistic graph is jagged; that of Soviet Union shows steady climb. Gives little data, and that in vague percentage figures. States mechanization of all mining operations important tasks for near future.

FDB 61T79

USSR/Mines and Mining Mining Methods Coal

Jan 1948

"Seventy-Fifth Anniversary of the Shaft 'Kochegarka'," S. S. Rodbort, S. K. Polevoy, Mining Engineers, 2 pp

"Ugol" No 1 (262)

This shaft located at GorlovskUgol® Trust of Artem-Ugol® Combine, being one of oldest shafts of Donbass region. Shaft and tunnels include area of 9.24 sq km. Discusses history of shafts and mentions type of coal obtained in field. Some of shafts have depth of 1,140 meters. Workers at this mine assigned task of increasing area of mines by 8 km of tunnels and putting into operation Shaft No 1, before end of this year. FDB

USSR/Mines and Mining

Jan 1948

Mining Methods Mining Machinery

"Some False Ideas Concerning the Utilization of a Flank Method of Mining," M. V. Mel'nikov, Candidate Tech Sci, Laureate of the Stalin Prize, 3 pp

"Ugol"" No 1 (262)

In many mines favorite method of working tunnels is a flank operation. Author claims this is inefficient and uneconomical. Favors frontal attack on tunnel where whole face of ore body is worked at same time. Presents methods of working mines using frontal method and describes machinery and equipment aggregate to be

FDB

61183

USSR/Mines and Mining Mining Equipment Braces - Strength Feb 1948

"Computations of the Thickness of Supports in Lava Shafts of the Sub-Moscow Basin," Engr V. A. Proskuryakov, Candidate Tech Sci, 3 pp

"Ugol" No 2 (263)

Thickness of supports varies according to density of veins and size of working area. Thickness can be decreased if size of working area is not large, and if vein is worked by method of cutting cells and chambers.

FDB

61**T**78 Jan 1948

USSR/Mines and Mining Mining Methods Bibliography

"New Articles on Mining" 1th pp

"Ugol" No 1 (262)

Bibliography of books published recently. Subject matter includes; geology of deposits, and survey drilling; physical-mechanical properties of rocks; carrying out of mining operations; blasting operations; methods of working tunnels; mechanization of mining operations.

FDB

61T80 Jan 1948

USSR/Mines and Mining Mining Methods Coal

"The Hundredth Anniversary of the Tkibul' Shaft,"
G. B. Bagdasarov, Mining Engr, 14 pp

"Ugol" No 1 (262)

1947 was the 100th anniversary of the Tkibul' coal mines. Discusses history of development of these mines. Some of shafts are 100 meters deep. All information is very general. It is stated that these mines increased four-fold over 1921 size, in the last seven years.

FDB

61T82 Jan 1948

USSR/Mines and Mining
Mining Equipment
Efficiency, Industrial

"Mechanization of the Work at the Podmoscow Basin Shafts in the Next Five Years," A. M. Terpigorev, Academician; B. A. Rozentreter, Candidate Tech Sci, 4 pp

"Ugol" No 1 (262)

Up to 1928 only 2% of mining work at these deposits was mechanized. However, by 1940, 90% of work was mechanized. From 1946 to 1950 it is expected that 66 new shafts will be sunk and operated. Despite fact that work has risen to prewar level, production

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FDB Periodical Abstracts Scientific No 61

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USSR/Mines and Mining

Jan 1948

USSR/Mines and Mining (Contd)

Jan 1948

used. Describes several types of combines already released for use at various mines. Results are satisfactory.

is as yet far below prewar level. Discusses facts brought to light by study conducted to determine reasons for this lack of equilibrium. Suggestions made for greater mechanization of work. Discusses new types of machines available.

FDR

61183

USSR/Mines and Mining Mining Machinery

Jan 1948

Mining Machinery

61T84 Jan 1948

Machines, Hoisting

"Results of the Test Use of a Scraper Conveyer at Anthracite Shafts, "S. M. Fedorenko, Chief Engr Shaft No 18 imeni Stalin, SnezhnyanAntratsit Trust, 12 pp

"Ugol" No 1 (262)

Scraper conveyer, installed at shaft 18 to determine its operation, yielded favorable results. Author discusses advantages in using this type of conveyer. Attractive features of this new equipment are simple construction and continuity of operation. On the average this apparatus is capable of operating continually for 22 months. FDB 61**T8**5

USSR/Petroleum Industry

Feb 1948

Oil Wells

Petroleum - Paraffin Removal

"Thermochemical Method of Processing Wells" ‡ p

"Neftyanoye Khozyaystvo" No 2

Short report of favorable results obtained by introducing magnesium into hydrochloric acid medium to clean paraffin and other waste matter from the bore of wells.

USSR/Mines and Mining

"Automatic Regulation of Shaft Elevators According to Academician M. M. Fedorov's Application of Harmonic Elevation," B. L. Davydov, Dr Tech Sci,

"Ugol" No 1 (262)

Summary of information contained in thesis submitted to Institute of Mining Mechanics, Academy of Sciences, USSR, in commemoration of death of Academician M. M. Fedorov. Discusses mainly problem of regulating shaft elevators during slow operation of

FDB

61186

USSR/Mines and Mining (Contd)

Laureate of Stalin Prize, 42 pp

Jan 1948

hoisting mechanism. Author states that harmonic theory is a new principle in shaft elevators.

FDB

61187

61**T**86

USSR/Petroleum Industry Oil Production

Feb 1948

"The Petroleum Industry in 1947 and Problems for 1948" 5 pp

"Neftyanoye Khozyaystvo" No 2

Oil production increased 19.6%; benzine production 35.7%; kerosene 25.5% and Diesel oil 31.3% over 1946 production. Prospect drilling has increased 50% over prewar level. Eastern regions became more important in USSR oil supply. In comparison with 1940, specific weight from these regions in total Soviet oil production increased three-fold. Goals for expansion and production in 1948 are given.

FDB

61**T**88

FDB

USSR/Petroleum Industry Petroleum - Well Drilling Feb 1948

"Economic Evaluation of the Use of Secondary Methods of Extracting Oil," L. M. Umanskiy, Groznyy, 4 pp

"Neftyanoye Khozyaystvo" No 2

Because of their economical aspects, process of maintaining stratified pressure and methods of secondary exploitation occupy a special place among modern methods of increasing output of petroleum. Economic effectiveness of process of maintaining stratified pressures and secondary methods of exploitation is confirmed by data from technologicaleconomic projects in Bori-Su, Tashkala and Gora-

FDB

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FDB Periodical Abstracts Scientific No 61

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USSR/Petroleum Tanks, Oil Oil Storage Feb 1948

USSR/Petroleum Industry (Contd)

Feb 1948

"Metallic Two-Layer Reservoirs for Petroleum, Petroleum Products and Gas," V. I. Chernikin, 3 pp

"Neftyanoye Khozyaystvo" No 2

Short discussion of technical questions raised in constructing petroleum storage tanks designed with two or more layers of storage space in order to save steel. A two-layer storage tank requires one half the metal of those of ordinary construction.

Gorskeya deposits. Describes methods for economic evaluation of methods of exploitation and of obtaining a technological-economic index of these deposits.

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6**1T**90

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61**T**89

USSR/Petroleum Tanks, Oil Oil Storage **Гер** 1948

USSR/Petroleum Industry 011 Production Petroleum - Well Drilling Mar 1948

"New Type of Group Petroleum Storage Tanks in the Buguruslanneft' Enterprises" 1 p

"Neftyanoye Khozyaystvo" No 2

Diagram and short explanation of interconnecting lines between tanks, wells, and refinery in group petroleum storage tank arrangements. "Neftyanoye Khozyaystvo" No 3

Gives a short paragraph on each of following subjects: achievements of Buzovnyneft' drillers; regulated plunger pumps; new measuring control devices; utilization of possibilities of an industry; new plants and new equipment; pipes with a left thread; stakhanovite work -- the guarantee of success; separator for cleaning clay solutions; tractor exploitation of "Bakinets" organization; achievements of geologists; and achievements of inclined drilling. FDB 61T92

"Information From Production Operations" 4 pp

FDB

61T91

USSR/Petroleum

Mer 1948

Viscosity, Low Temperature

"Low Temperature Properties of Oils With Body Admixtures," N. G. Puchkov, 8 pp

"Neftyanoye Khozyaystvo" No 3

By using viscous admixtures it is possible to obtain an oil which has less viscosity at low temperatures and a more sloping viscosity-temperature curve than ordinary oils. Increase of molecular weight of the admixture increases steepness of temperature curve of viscosity of equally condensed oils. Viscosity of oils containing viscous admixtures remains stable during long storage.

FDB

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611793

USSR/Petroleum Geology

Mar 1948

"Geological Structure and Perspectives of Petroleum Capacity of the Northern Starunya Region," I. S. Sharanov, 2 pp

"Neftyanoye Khozyayatvo" No 3

Region is in foothills of Eastern Carpathians. Gives map of geological structure with brief discussion. Region is interesting from point of view of its oil capacity and author proposes that prospecting work be started.

61195

"Correlation of Productive Horizons of Oil Deposits of the Il'sko-Kholmsk Region According to Quality of the Oil," V. D. Lashchenov, 2 pp

"Neftyanoye Khozyaystvo" No 3

USSR/Petroleum Industry

Oil Production

Complicated structure of this area makes it almost impossible to give correct complete analysis of deposit structure from core samples taken by electrical means. To supplement data of this type, author suggests method of correlation of quality of oil taken from various wells in area in order to give a more perfect picture of productive horizons of deposit.

61794

USSR/Petroleum Geology Mar 1948

Mar 1948

"Perspectives of Petroleum Capacity of the Lower Permian Deposits of Kuybyshev Zavolzh'ye," L. N. Rozanov, V. D. Sukhareva, 6½ pp

"Neftyanoye Khozyaystvo" No 3

Presents author's analysis showing that study of structure of lower Permian deposits can be solved, by method of correlation of diagrams of core samples, taken by electrical means, in conjunction with geological materials. Mentions conflicting opinions on geological structure of lower Permian deposits of Kuybyshev Zavolzh'ye, an important area since industrial flows of light oil obtained there in 1945-46.

FDB Periodical Abstracts Scientific No 61

Mar 1948

USSR/Petroleum Industry Emulsifiers, Oil

Mar 1948

Oil Production

"Direct De-emulsion of Petroleum in Drilling," N. A. Golubev, 12 pp

"Neftyanoye Khozyaystvo" No 3

Thermochemical method is most common method of processing an emulsion, which is subjected to heating with simultaneous introduction of chemical reagents. Considering that oil has a high temperature at bore of well, authors propose, instead of heating of the oil artificially, to introduce chemical reagents directly into bore of well, which is exploited by means of a compressor. Describes an apparatus designed for deemulsion of oil inside well.

FDB

61**T**97

USSR/Petroleum Industry Petroleum - Hydrogenization Mar 1948

"Application of the Buffer Layer Method in Flooding in Tuymaz," A. A. Varov, 32 pp

"Neftyanoye Khozyaystvo" No 3

Buffer layer method of flooding was developed experimentally and put into use by geologist V. A. Gorin. Method consists of injecting water into petroleum bed most suited chemically for increasing washing capacity and coefficient of oil delivery. Water is injected near border of water-oil contact in such a volume that an active layer is formed.

FDB

61**T**99

USSR/Fetroleum Industry Oil Production

Mar 1948

"Problems and Methods of Establishing Average Progressive Production Norms," P. A. Golyakov, 42 pp

"Neftyanoye Khozyaystvo" No 3

Solution of production problems posed by present Five-Year Plan demands development and introduction of complex technological, organizational and economic measures directed toward supplementing sources of further productivity of labor in petroleum industry. One factor conditioning growth of labor productivity is introduction of average progressive norms. Discusses briefly problems of introducing these technical and economic norms into petroleum industry. FDB 61T101

USSR/Soil Science

Mar 1948

Sand - Stratification

"Features of the Genesis and Mechanical Composition of Soils in the Deep Sandy Deposits of the Setaria Terrace of the River Vyatka, "S. A. Kovrigin, 10 pp

"Pochvovedeniye" No 3

FDB

Material for article gathered in Suvod forest dacha which is situated on left bank of Vyatka River in a pine woods which has developed on fluvioglacial sands Gives complete analyses of soil of these deposits in tabular form with description of area.

61T103

USSR/Petroleum

Oil Pressure

"The Significance of Pressure for Rate of Delivery of Oil by a Bed," G. V. Pykhachev, 4 pp

"Neftyanoye Khozyaystvo" No 3

Technical mathematical discussion of role of pressure in the rate of delivery of oil from a well.

FDB

61**T**98

USSR/Petroleum Industry Oil Production

Mar 1948

"Standardization and Normalization in the Petroleum Industry of the USSR," A. A. Al'tman, 32 pp

"Neftyanoye Khozyaystvo" No 3

Standardization and normalization are most important factors for accelerating introduction of advanced technological processes, newest types of equipment and newest methods of production. Discusses briefly problems of introduction of usable standards for products and equipment in petroleum industry.

FDB

<u>61T100</u>

USSR/Soil Science Agriculture

Jan 1948

"Effect of Chlorates on the Soil and the Stimulation of Growth of a Culture," N. Ye. Dekatov, Candidate Agr Sci, 42 pp

"Sovetskaya Agronomiya" No l

Presents data and discussion showing that study of experimental work, done by various investigators on use of chlorates as herbicide in agriculture, shows that with appropriate use of the chemical, harvest of agricultural products can be greatly increased.

FDB

61T102

USSR/Soil Science Erosion

Mar 1948

"History and Modern Status of Soil Science," All-Union Conference on Methods of Agrochemical Research on Fertility of Soils; All-Union Conference on . Methods of Research on Erosion of Soils; Resolution of the Conference on Methods for Research on Erosion of Soils, Moscow, 15-20 Nov 1947; Conference for Classification of Soils and Methods of Soil Surveying, 19 pp

"Pochvovedeniye" No 3

Report of proceedings of these conferences. Discusses subjects reviewed and lists persons partici-

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USSR/Soil Science	Mar 1948	USSR/	Soil Science (Contd)	Mar 1948
"Resolution of the Conference sion for the Classification Moscow, 20-25 November 1947"	and Cartography of Soils,	pating in conference. Resolution favors establishment of expedition, station and laboratory research to combat erosion.		
"Pochvovedeniye" No 3				
Resolution requests Soil Insences, together with other is to place again before govern of organization of a Soil Stasis of earlier developed mealls for publication of repence.	nterested institutions, ment of the USSR question uty Service in USSR on materials. Resolution also			
FDB	611105	FDB		611104
USSR/Soil Science Bibliography	Mar 1948		List of Abbreviations	
"Bibliography (General; Fact Genesis, Geography and Carto of Soils; Chemistry of Soils of Soils; Fertility of Soils "Pochvovedeniye" No 3 List of 112 books on subject	graphy of Soils; Physics , Soil Mineralogy; Biology) 5 pp	ID AMC ST BM BS SI LC FDB COM AF	Intelligence Division Library Air Documents Division, Air Mater Reference Division, State Departs Bureau of Mines, Department of In National Bureau of Standards Smithsonian Institution Library of Congress Foreign Documents Branch, CIA Department of Commerce A-2 Library, USAF	iel Command
FDB	611106			
List of Abbre used in FDB Period ID Intelligence Division AMC Air Documents Division ST Reference Division, S BM Bureau of Mines, Depa BS National Bureau of St SI Smithsonian Instituti LC Library of Congress FDB Foreign Documents Bra	ical Abstracts Library n, Air Materiel Command tate Department rtment of Interior andards on	ID AMC ST BM ES SI LC FDB COM	List of Abbreviations used in FDB Periodical Abstract Intelligence Division Library Air Documents Division, Air Mater Reference Division, State Departm Bureau of Mines, Department of In National Bureau of Standards Smithsonian Institution Library of Congress Foreign Documents Branch, CIA Department of Commerce	iel Command ent